Abstract

A method and apparatus are provided for converting electromagnetic radiation directly into electricity. The method aligns a plurality of ferromagnetic nanocrystals to produce an aggregate magnetic field; utilizes an electrical coil in the aggregate magnetic field; and alternately directs and removes radiant energy from the ferromagnetic nanocrystals such that the aggregate magnetic field decays and regenerates to produce a current in the electrical coil. The apparatus includes either a distribution or a stackup of ferro-magnetic nanocrystals and an electrical coil, the combination of the nanocrystals and the electrical coil operating with energy derived from the source of radiant energy.